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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,871	03/05/2002	Rajiv Laroia	Flarion-4/APP	7954

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EXAMINER

DYKE, KERRI M

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/090,871	<b>Applicant(s)</b> LAROIA ET AL.	
	<b>Examiner</b> Kerri M. Rose	<b>Art Unit</b> 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 19 July 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 21-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 26-54 is/are allowed.
- 6) ☒ Claim(s) 21-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments, see section V, filed 7/19/06, with respect to the rejection(s) of claim(s) 26-54 under 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn.

2. Applicant's arguments filed 7/19/06, with respect to the rejection of claims 21-23 and 25 under 102 have been fully considered but they are not persuasive. Knutson discloses an initial fixed *sample* rate in column 8 line 32. A sample rate is not the same as a symbol rate. Column 8 lines 26 and 27 state, "... a given symbol (chip) rate, in accordance with its timebase..." As previously noted, the timebase is fixed. Since the symbol rate is based on the timebase, it too is fixed.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. **Claims 21-23 and 25 are rejected under 35 U.S.C. 102(e) as being anticipated by Knutson et al. (US 6,563,862).**

5. In regards to claim 21, Knutson discloses a communications system, comprising: a first base station, the first base station including: i) a base station clock (figure 4-411), ii) a receiver circuit for receiving symbols coupled to said clock (4-112), the receiver circuit having fixed symbol timing (column 8 line 24); and iii) a transmitter circuit for transmitting symbols coupled

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to said clock (4-111), the transmitter circuit having fixed symbol timing (column 8 line 24); and a first mobile communications device for receiving symbols broadcast by said first base station and transmitting symbols to said first base station, the mobile communication device including: i) a receiver circuit for receiving signals from said first base station (4-122), the receiver circuit including receiver symbol timing adjustment circuitry for adjusting receiver symbol timing as a function of a signal received from said first base station (4-431); and ii) a transmitter circuit for transmitting symbols to said first base station (4-121), the transmitter circuit including transmitter symbol timing control circuitry slaved to said receiver symbol timing adjustment circuitry (4-251), the transmitter symbol timing control circuitry making adjustments to the transmitter symbol timing which are the same or substantially the same as the adjustments made by the receiver symbol timing adjustment circuitry to the receiver symbol timing (col. 8 lines 1-6 disclose that the transmitter clock is slaved to the receiver clock and makes the same adjustments).

6. In regards to claim 22, Knutson discloses the system of claim 21, wherein the signal received from said first base station is a timing control signal used to control the receiver circuit to make a symbol timing correction. Column 7 lines 49-53 discloses that a signal is received at the handset from the base station. The signal is used for timing correction, which means the signal can be thought of as a timing control signal.

7. In regards to claim 23, Knutson discloses the communication system of claim 21, further comprising: a second mobile communications device for receiving symbols broadcast by said first base station and transmitting symbols to said first base station, the mobile communication device including: i) a receiver circuit for receiving signals from said first base station, the

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receiver circuit including receiver symbol timing adjustment circuitry for adjusting receiver symbol timing as a function of a signal received from said first base station; and ii) a transmitter circuit for transmitting symbols to said first base station, the transmitter circuit including transmitter symbol timing control circuitry slaved to said receiver symbol timing adjustment circuitry, the transmitter symbol timing control circuitry making adjustments to the transmitter symbol timing which are the same or substantially the same as the adjustments made by the receiver symbol timing adjustment circuitry to the receiver symbol timing. Column 4 line 66 – column 5 line 5 discloses that there may be multiple mobile devices and each operate using the same method.

8. In regards to claim 25, Knutson discloses the system of claim 23, wherein the transmitter included in said first base station is an OFDM transmitter. Column 4 line 50 discloses that the system may operate using OFDM. Column 9 lines 9-19 also discloses that the system is compatible with many different modulation techniques and one skilled in the art would readily recognize the modifications needed for each modulation scheme.

***Claim Rejections - 35 USC § 103***

9. **Claims 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over Knutson et al. (US 6,563,862).**

10. Claim 24 includes limitations where the mobile device is in communication with two separate base stations at the same time. The mobile device is able to independently adjust each signal in order to correct the timing individually for each base station. Knutson discloses methods for adjusting the timing when in communication with one base station, but not in communication with two base stations. It is common and well-known that mobile devices will

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be in contact with two base stations during handover. It therefore would have been obvious to one of ordinary skill in the art to modify the timing adjustment method and device of Knutson in order to adjust two individual signals from different base stations.

***Allowable Subject Matter***

11. Claims 26-54 are allowed.

***Conclusion***

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kerri M. Rose whose telephone number is (571) 272-0542. The examiner can normally be reached on Monday through Thursday, 7:00 am - 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (571) 272-3126. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

kmr



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